## Validation of Wind Storm Damage on the Monongahela National Forest

July 10-11, July 19, July 24-25, 2012

On Tuesday, July 10<sup>th</sup>, I met with Jane Bard, Silviculturalist for the south zone of the MNF, to locate and report on wind storm damage. Our first stop was located off the Highland Scenic Highway on Kennison Mountain (see photo 1). The damage appeared to be approximately 7 acres in size. Not all trees were down with approximately 30 - 50% of the crown removed, depending on the location.

From Kennison Mountain, Jane and I drove FS road 76 to Red Oak Knob. Intermittent, small pockets of downed trees were found along the drive, with a majority of the damage in riparian areas. Nothing was noted on the ridge tops where we thought most of the damage would be detected. Jane and I climbed the Red Oak Fire tower and we could not detect any extensive damage along the ridge tops or mountain sides. The areas of damage were too small to detect.

On Wednesday, July 11<sup>th</sup>, I met with Rondi Fischer, District Ranger for the Greenbrier, and told her I was looking for areas of wind storm damage that were at least 14 acres in size. I explained how FHP wanted to use this information to validate sites that may appear on satellite imagery from the Forest Disturbance Mapper. I briefly explained the system. At the time she was not aware of any large damage areas because reports were similar to what Jane and I found the day before, small pockets of downed trees blocking roads and damage to camp sites.

I met with Jane Bard at the Blue Bend Campground to check hemlock trees that were recently killed by hemlock borer and to check treatment efficacy on trees that were treated in the fall of 2011. On my drive from Elkins to Blue Bend CG, wind damage could be found in small isolated spots. Jane and I found no damage at Blue Bend CG. We then proceeded to North Fork of Anthony Creek Road. This area had reports of major wind damage. FS crews removed trees that fell across the road, but here again; the damage was in small isolated pockets located in the riparian, which coincidently is adjacent to the road. The last site visit of the day was to Lake Sherwood. The Campground had to be closed due to wind storm damage. Same story here. A few trees were came down in the campsites and had to be removed.

On July 19<sup>th</sup>, I worked with David Ede (Forest Planner, MNF) and Sam Lammie (GIS Specialist, MNF) in the northern portion of the forest. Very little storm damage could be detected, even in the high elevation areas located on Shavers Mountain (Gaudineer Knob). We continued our work from Bartow to Seneca Rocks and back to Elkins.

On July 24-25, Dan Twardus and I visited sites that were detected by the Forest Disturbance Mapper as "disturbance". All sites with the exception of one, could be validated with some type of disturbance (i.e. logging (see photo 2), locust leafminer (see photo 3), hemlock mortality, browning of cheat grass, etc. No areas of storm damage were detected by the Forest Disturbance Mapper. Photo 4 is an example of the type of storm damage that can be found throughout the MNF.

After three separate visits to the MNF, my findings were the same as reported by Rondi Fisher and other field personnel across the forest. A majority of the wind damage happened on the southern portion of the Forest, with intermittent pockets of downed trees, mostly in the riparian areas. The largest area of damage reported to date, is the 7 acres located on Kennison Mountain.

I would like to note that with all of the driving I did on the MNF the last three weeks, tree mortality due to storm damage pales in comparison to the extent and distribution of hemlock mortality that is becoming so prevalent across the Forest (photo 5).



Photo 1. Wind Storm Damage on Kennison Mountain.



Photo 2. Validation of Forest disturbance mapper- logging site.



Photo 3. Validation of Forest Disturbance Mapper – Locust Leafminer



Photo 4 – Typical Storm Damage Found Throughout the MNF



Photo 5 – Hemlock Mortality – Sugar Creek area off the Highland Scenic Highway